

SNOHOMISH COUNTY JOB DESCRIPTION

ENGINEER II

Spec No. 3029

BASIC FUNCTION

To perform a variety of professional engineering assignments in design, traffic, construction, land development or program development which requires the application of standard engineering principles and methods. Assists Engineers III or IV, or coordinates the work of consultants or engineering staff as it relates to assigned engineering projects.

STATEMENT OF ESSENTIAL JOB DUTIES

1. Provides project management of road, bridge and other Public Works construction projects, including preparing or overseeing the preparation of specifications, cost and quantity estimates, the design of projects such as road, signal and bridge improvements, and surface water projects, and the oversight of the construction process.
2. Oversees project construction to assure work is performed in accordance with plans and specifications; monitors and coordinates construction engineering activities, maintains field records, prepares progress estimates and change orders, develops budget projections and directs field technical personnel.
3. Conducts or directs the preparation of studies and preliminary field surveys in preparation for design and construction of public works facilities such as roadways, bridges, signals, solid waste sites, or drainage improvements.
4. Directs the site inspections of construction work to verify quality of installations and coordinate timely and quality completion for acceptance; monitors contractor progress and schedules quality assurance tests and materials approvals.
5. Directs the inspection and maintenance of county bridges; assures that bridges and culverts are periodically inspected, maintained and repaired; submits the Annual Bridge Report required by the state on existing bridge conditions.
6. Prepares project prospectus for applications for federal and state funding of public works projects, including the recommendations for improvements, estimates of required quantities, project cost estimates, and other relevant data.
7. Researches, analyzes and resolves engineering problems on county construction projects.
8. Develops, coordinates, and promotes funding program such as the Road Improvement District or River Improvement programs for the design, construction and maintenance of road, bridge and drainage projects; provides information and assistance to program applicants.

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STATEMENT OF ESSENTIAL JOB DUTIES (Continued)

11. Prepares right-of-way plans in order to acquire land for public works facilities; researches ownership, project requirements, and writes legal descriptions to convey property.
12. Provides information to professional engineers, architects, developers, county officials and the general public; presents and explains technical design or operational features, project priorities and development requirements of county policies.
13. Attends public meetings and formal public hearings on proposed county construction projects; prepares or supervises the preparation of maps, exhibits, drawings, charts and graphs and provides technical testimony as required.
14. Coordinates and reviews the work of other engineering staff as it relates to assigned construction projects; provides training in related work as required.
15. Prepares and reviews technical reports related to engineering assignments, including the areas of hydrology, hydraulics, traffic capacity, signal design, roadway geometrics, and roadway structure design.

STATEMENT OF OTHER JOB DUTIES

16. Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

A Bachelor of Science degree in civil engineering or related field; AND two (2) years of professional civil engineering experience; OR, any equivalent combination of education and experience which provides the required knowledge, skill and ability to perform the work. Must pass job related tests.

SPECIAL REQUIREMENTS

An Engineer-in-Training certificate is required.

A valid Washington State Driver's License is required for employment.

KNOWLEDGE AND ABILITIES

Knowledge of:

- principles, practices and techniques of engineering related to area of assignment
- federal, state and local laws, rules and regulations related to area of assignment administration

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KNOWLEDGE AND ABILITIES (Continued)

- the methods and techniques used in conducting engineering studies and needs assessments
- the principles and practices of grant writing, contract negotiation and administration
- the literature, trends and developments in the area of specialty
- hydraulic and hydrologic computer modeling techniques
- computer software programs used in area of assignment

Ability to:

- interpret and assess field data used for the maintenance and design of construction projects
- prepare engineering plans, specifications and estimates
- direct and evaluate the inspection and appraisal of condition of public works structures
- allocate and make effective use of available resources
- assess the relative advantages and disadvantages of alternative courses of action
- gather, analyze, synthesize and evaluate a variety of data including statistical data
- read, interpret and apply federal, state and local laws, rules and regulations governing area of assignment
- analyze and evaluate operations and take effective action to correct deficiencies and resolve problems
- establish and maintain effective working relationships with elected officials, department heads, associates, subordinates, representatives of other agencies and with the general public
- communicate effectively, both orally and in writing
- prepare a variety of correspondence, reports, and other written materials and documents
- develop, run and assess various hydraulic and hydrologic models (required for some positions)
- use personal computer applications effectively

SUPERVISION

The work requires considerable independent judgment and discretion in developing and achieving work unit goals and objectives. The work is reviewed through meetings and periodic status reports, and by evaluation of results obtained.

WORKING CONDITIONS

The work is performed in an office or field environment with frequent field trips to locations throughout the county to make site visits, attend meetings, or coordinate work activities. Meetings or project requirements may involve working evenings, weekends or holidays as necessary.

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Snohomish County is an Equal Employment Opportunity (EEO) employer.
Accommodations for individuals with disabilities are provided upon request.

[EEO policy and ADA notice](#)

Class Established: 1980
Previous Spec No. 420411
Revised: March 1986, October 2009
EEO Category: 2 - Professionals
Pay Grade: 243 - Classified Pay Plan
Workers Comp: 1501 Hazardous